Meibomian Gland Dysfunction (MGD)

Patient Information

Information and advice to help you understand and manage your condition

The information in this leaflet has been developed by Scope Ophthalmics
You have been diagnosed with Meibomian Gland Dysfunction (MGD), a chronic condition which occurs when the glands in the eyelids don’t produce enough oil, or the oil that is produced is of poor quality. This oil is called Meibum. It protects the watery layer of tears which cover your eyes and prevents them from drying out.

The surface of your eye is covered by a thin layer of tears, called the Tear Film. Your Tear Film has several important functions; it washes, protects, nourishes and lubricates the eye.

Blinking smooths the Tear Film evenly across the surface of the eye and stimulates the production of tears.

Tears are produced by several systems, and if any part of these systems break down, it can result in a reduced quality or quantity of tears.

The lipid (oily) layer of the Tear Film is very important. It is produced by the Meibomian glands in the eyelids. If the lipid layer is not present or is of poor quality in the Tear Film, eye problems can result.
The Tear Film

**LIPID (OIL) LAYER**
- lubricates
- prevents evaporation

**AQUEOUS (WATER) LAYER**
- nourishes
- protects the eye

**MUCIN LAYER**
- allows the water layer to spread evenly over the surface of the eye
### Symptoms and causes

If you have MGD, you may suffer from **some** or **all** of the following:

<table>
<thead>
<tr>
<th>Watery eyes</th>
<th>Burning or gritty sensation in the eyes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sore, red, inflamed eyelids</td>
<td>Eyelids that are difficult to open in the mornings</td>
</tr>
<tr>
<td>Light sensitivity</td>
<td>Dandruff around the eyelids</td>
</tr>
<tr>
<td>Fluctuations in vision</td>
<td>Contact lens discomfort</td>
</tr>
</tbody>
</table>
What are the **possible causes** of MGD?

MGD occurs when the Meibomian glands (which make the oily layer of the Tear Film), are not working properly and become clogged.

When the glands become clogged, the oily part of the tears cannot be released. This causes the watery tears to dry up more quickly which results in the eye becoming dry and uncomfortable. Possible causes include:

- Blinking less frequently
- Incomplete blinking
- Aging
- Changes in hormone levels
- A diet low in omega-3 fatty acids, or high in omega-6 fatty acids
Advice & treatment

A daily eyecare regime is the most important part of treating and managing MGD, and related conditions such as Dry Eye Disease (DED) and Blepharitis.

**Compliance**

A key element in the treatment of DED, Blepharitis and MGD is patient compliance in managing their therapies. The use of preservative free products can aid this as it reduces patient discomfort, a large contributing factor in non-compliance.

### 1. Heat

Applying a **heated eye mask** or warm cloth* to closed eyelids for 10 minutes, can help soften the clogged oils in the eyelid glands. This allows the oils to flow more freely and helps prevent the tears from evaporating from the surface of the eye.

**Massage**

Following the heated eye mask, **gently massage** the eyelids using your forefinger. Massaging will help to push the oil out from the eyelid glands.

* A warm cloth may not retain the warmth as long as a commercially available heat mask specifically for the eye.
2. Cleanse

While lid scrubs using diluted baby shampoo applied by swab or cotton bud have been the most widely recommended method, there are newer, more effective methods of managing lid hygiene. Commercially available lid scrubs, wipes and foams can help remove debris, bacteria and oil from the eyelids. Lid scrubs and wipes are usually pre-soaked in a cleansing solution and ready to use.

Using preservative free methods where possible is recommended, as the long-term use of preservatives can be harmful to the ocular surface.

3. Hydrate

Eye Care Professionals recommend the use of preservative free eye lubricants and sprays which have shown to be more effective than preserved eye drops or ointments in reducing inflammation on the eyes.

Tear replacement with eye drops, sprays or ointments are traditionally considered a mainstay of DED management, however it is recommended that they are used in conjunction with other therapies to target the underlying causes of DED.

Supplement

Eye Care Professionals recommend a diet rich in Omega-3 Fatty Acids and/or the use of nutritional supplements to help manage MGD.

Increasing your consumption of Omega-3 Fatty Acids can improve the oil in your glands and relieve symptoms associated with Dry Eye and MGD.

It is important to choose an Omega-3 supplement that is highly absorbable by the body to ensure best results. A healthcare professional can suggest a suitable supplement for you.
As there are many treatment options available, please ask your healthcare professional which is best for you.

Your healthcare professional recommends:

1. Product recommended: ____________________________________________
   Use ________ times daily for ________ weeks

2. Product recommended: ____________________________________________
   Use ________ times daily for ________ weeks

3. Product recommended: ____________________________________________
   Use ________ times daily for ________ weeks

4. Product recommended: ____________________________________________
   Use ________ times daily for ________ weeks